

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. 70-47

PRESCRIBING REQUIREMENTS FOR WASTE DISCHARGES BY CITY OF SAN
RAFAEL AND SAN RAFAEL SANITATION DISTRICT INTO SAN RAFAEL
AND SAN PABLO BAYS, MARIN COUNTY AND RESCINDING RESOLUTION
NO. 68-30

WHEREAS THIS REGIONAL BOARD HAS CONSIDERED

INFORMATION ABOUT THIS DISCHARGE

1. On April 30, 1968 this Regional Board adopted Resolution No. 68-30 to prescribe waste discharge requirements for two treatment plants and sewer overflows for the San Rafael Sanitation District.
2. On October 15, 1969 the City of San Rafael and the San Rafael Sanitation District signed an agreement whereby the gravity sewage collection system within the City was placed under the City's jurisdiction while the District retained jurisdiction over that portion of the collection system outside of the City and the interception treatment and disposal facilities.
3. San Rafael Sanitation District filed a Report on Waste Discharge dated April 3, 1970 which proposed a 1000 foot outfall extension to San Pablo from the Marin Bay treatment plant.
4. Information in the aforementioned Report in a letter dated April 20, 1970 from the District's engineering consultant and other information in the Regional Board's files describe these existing and the proposed waste discharges as follows:

A. Discharge "A" (Main Treatment Plant)

1. The waste is being discharged as follows:
 - a. At the shoreline of San Rafael Bay approximately 2000 feet westerly from Murphy Rock, 4000 feet southerly from the mouth of San Rafael Creek and 1500 feet northeasterly from State Highway 17
 - b. The waste flows more than 2000 feet across mud flats during low tides before reaching the receiving water
2. The waste is mixed sewage and industrial waste
3. The waste flow is estimated as follows:
 - a. Present
 - (1) Average dry weather 2.50 mgd
 - (2) Peak wet weather greater than 9 mgd

- b. Design 5 mgd
 - 4. The population served is estimated as follows:
 - a. Present 25,000 persons
 - b. Design 50,000 persons
 - c. Ultimate for present service area (year 2020) 50,000 persons
 - 5. During wet weather, bypassing occurs from the sewerage system which is tributary to this discharge as follows:
 - a. When the flow at the treatment plant exceeds 5 mgd, bypassing of the plant can occur. Bypassing occurred twice last year.
 - b. From manholes and other parts in the collection system.
- B. Discharge "B" (Marin Bay Plant)
 - 1. The waste is being discharged as follows:
 - a. Into San Pablo Bay at a point adjacent to the shoreline and to North San Pedro Road and approximately 2000 feet westerly from China Camp.
 - b. The waste flows several hundred feet across mud flats during low tides before reaching the receiving water.
 - 2. The proposed 12-inch extended outfall will discharge at a location 1000 feet easterly from the present discharge, and 2000 feet westerly from China Camp. The discharge will be submerged at all times.
 - 3. The waste is domestic sewage only.
 - 4. The waste flow is estimated as follows:
 - a. Present 0.09 mgd
 - b. Design 0.16 mgd
 - 5. The population served is estimated as follows:
 - a. Present 1500 persons
 - b. Design 2000 persons.

CORRESPONDENCE

This Regional Board has considered recommendations about this matter from:

1. State Department of Fish and Game in its memorandum dated May 20, 1970
2. State Department of Public Health in its memorandum dated May 21, 1970
3. State Department of Water Resources in its memorandum dated May 20, 1970
4. Marin County Health Department in its letter dated May 21, 1970.

STAFF INVESTIGATION

1. These wastes can affect the following present and proposed beneficial water uses in San Rafael and San Pablo Bays:

Water-skiing, wading, pleasure boating, marinas, fishing, shellfishing, and hunting

Fish, shellfish, and wildlife propagation and sustenance, and waterfowl and migratory birds habitat and resting

Navigation channels

Esthetic appeal.

2. Land within 1000 feet of the outfalls is used for recreation and transportation.

RESOLVED BY THIS REGIONAL BOARD

BOARD INTENT

1. Protect public health as it may be affected by this waste discharge.
2. Prevent nuisance, as defined in Section 13050(m) of the California Water Code.
3. Protect the beneficial water uses listed under "Staff Investigation" above, except shellfishing.

In accordance with Section XVII of its Resolution No. 803, this Board has received a report from the Department of Fish and Game dated August 26, 1968, which describes beds suitable for shellfishing that are located:

- (1) Near Discharge "A" along the shoreline of San Rafael Bay.
- (2) Near Discharge "B" from Gallinas Creek to Rat Rock.

This Board will consider the matter of protecting these beds for the taking of shellfish for human consumption after it has reviewed reports submitted by the State Department of Public Health and other information.

WASTE DISCHARGE REQUIREMENTS - RECEIVING WATERS

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The discharge shall not:

a. Unreasonably affect any of the protected beneficial water uses resulting from:

Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place;

Bottom deposits at any place;

Aquatic growths at any place;

Alteration of temperature, turbidity, or apparent color beyond present natural background levels in waters of the State at any place.

b. Cause visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place.

c. Cause waters of the State to exceed the following limits of quality at any point:

pH	7.0 minimum 8.5 maximum
Dissolved oxygen	5.0 mg/l minimum
Dissolved sulfide	0.1 mg/l maximum
Nutrients	to be prescribed at the earliest practicable date
Other substances	any one or more substances in concentrations that impair any of the protected beneficial water uses or make aquatic life or wildlife unfit or unpalatable for consumption.

d. Cause waters of the State to exceed the following limits of quality at any place within one foot of the water surface:

Coliform Organisms	240 MPN/100 ml, median of five consecutive samples, maximum 10,000 MPN/100 ml, any single sample, maximum
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Whenever either of these bacterial values is exceeded in the receiving water for any reason they shall both be met instead in the waste at some point in the treatment process.

The discharger may demonstrate compliance in the waste stream as an optional alternative.

The Board will accept proof of effective effluent disinfection in terms of factors other than bacterial concentrations if the discharger documents a sound statistical correlation between such factors and bacterial analysis, and provided the conditions of sewage strength and treatment do not change from the demonstration period.

WASTE DISCHARGE REQUIREMENTS - WASTE STREAM

The waste streams discharged to waters of the State shall meet these quality limits at all times:

1. In any grab sample:

Settleable matter

The arithmetic average of any six or more samples collected on any day

0.5 ml/l/hr., maximum

80% of all individual samples collected during maximum daily flow over any 30-day period

0.4 ml/l/hr., maximum

Any sample

1.0 ml/l/hr., maximum

2. In any representative 24-hour composite sample:

Toxicity: Survival of test fishes in 96-hour bioassays of the waste as discharged

Any sample

75%, minimum

Average of any three or more consecutive samples collected during any 21 or more days

90%, minimum

3. When the proposed submerged outfall extension is completed, the toxicity requirement for Waste "B" shall be:

In any representative 24-hour composite sample:

Toxicity: the concentration
of the waste itself in the
receiving waters

10 per cent of the 96-hour
TL_m concentration of the
waste as discharged, maximum

PROHIBITION

Pursuant to Section 13243 of the California Water Code the discharge of untreated sewage from the sewer system tributary to Discharge "A" to waters of the State is prohibited.

REPORTING REQUIREMENTS

1. This Resolution includes items numbered 1, 2, 3, 4, 6 and 7 of the attached "Reporting Requirements", dated January 1, 1970.
2. The City and District are required to file written reports with this Regional Board pursuant to Section 13267 of the California Water Code as follows:

June 15, 1970
September 15, 1970
April 15, 1971
September 15, 1971
April 15, 1972
September 15, 1972
April 15, 1973,

each report to describe the status of construction and each April 15 report to document the reduction of discharges prohibited above.

NOTIFICATIONS

1. This Board finds that the time schedule outlined below represents an adequate amount of time for the City and the District to comply with the above prohibition and that failure by the City and/or District to complete any step in accordance with this schedule will be cause for the Board to consider issuance of an Order to Cease and Desist pursuant to Section 13301 of the California Water Code.

Completion of financing as
demonstrated by voter approval
of a bond issue

June 2, 1970

Completion of the following
stages of construction as
described in the "Report for
the Improvements and Additions
to the Sanitary Sewer System,
June 1969"

Stages 1, 2 and 3
Stages 4, 5, 6 and 7
Stages 8, 9 and 10

November 1, 1970
September 1, 1971
September 1, 1972

Demonstration of full compliance with the above prohibition, no later than April 15, 1973.

2. Notwithstanding the above time schedule this Regional Board reserves the right to issue a cease and desist order to the City and/or District at any time for the violation of requirements prescribed in this Resolution.
3. This Board's Resolution No. 68-30 is hereby rescinded.
4. This Resolution includes items numbered 1, 2, 3, 4, 5, 6 and 7 of the attached "Notifications", dated January 6, 1970.

WILLIAM C. WEBER
Chairman

May 28, 1970

I, Fred H. Dierker, hereby certify that the foregoing is a true and correct copy of Resolution No. 70-47 adopted by the California Regional Water Quality Control Board - San Francisco Bay Region at its regular meeting on May 28, 1970.

FRED H. DIERKER
Executive Officer
CALIFORNIA REGIONAL WATER QUALITY CONTROL
BOARD - SAN FRANCISCO BAY REGION

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
January 1, 1970

REPORTING REQUIREMENTS

1. This Board requires the discharger to file technical reports on self-monitoring work performed according to detailed specifications developed pursuant to the Regional Board's Resolution No. 398. (Reference: Sections 13267(b) and 13268, California Water Code.)
2. This Board requires the discharger to file a written report within 90 days after the average dry-weather waste flow for any month equals or exceeds 80% of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.

The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(b) and 13268, California Water Code.)

3. This Board requires the discharger to file a time schedule for engineering studies on facilities needed to comply with the Board's receiving water objective of 5.0 mg/l of dissolved oxygen and/or to file a time schedule for deciding upon the feasibility of participating in regional water quality control systems if he does not meet that dissolved oxygen objective after providing waste treatment facilities which comply with the effluent BOD requirement prescribed elsewhere in this Resolution. (Reference: Sections 13267(b) and 13268, California Water Code.)
4. This Board requires the discharger to file technical reports on studies into correcting violations of the Board's water quality objectives caused by discharging combined storm water and sewage. Specifications for these studies shall be developed pursuant to the Board's Resolution No. 398. (Reference: Sections 13267(b) and 13268, California Water Code.)

5. This Board requires the discharger to file written reports within 15 days after each calendar quarter to include:

Name of and number of lots in each subdivision for which an application has been received for connection to the sewerage system.
Anticipated date of connection of each subdivision to the sewerage system.

Finding and supporting data by governing body on effect of addition of each subdivision on violation of waste discharge requirements.

(Reference: Section 11551.6 Business and Professions Code and Sections 13267(b) and 13268, California Water Code.)

6. This Board requires the discharger to file a report on waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge. (Reference: Sections 13260(b) and 13264, California Water Code.)
7. This Board requires the discharger to file a written technical report at least 15 days prior to advertising for bids on any construction project which would cause or aggravate the discharge of waste in violation of these requirements; said report to describe the nature, costs, and scheduling of all actions necessary to preclude such discharge. In no case should any discharge of sewage bearing wastes be permitted without at least primary treatment and chlorination. (Reference: Sections 13267(b) and 13268, California Water Code.)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
January 6, 1970

NOTIFICATIONS

1. This Board requests the discharger to take note of the comments and recommendations contained in all the correspondence the Board has received and considered concerning this matter, and the Executive Officer is directed to transmit copies of that correspondence to the discharger.
2. This Board considers "Waters of the State" as defined in Section 13050(e) of the California Water Code to include waste waters over which the discharger has lost control.
3. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
4. This Board will prescribe more restrictive requirements for this waste discharge if necessary:

To achieve or maintain dissolved oxygen concentration of at least 5.0 mg/l in tidal waters of the San Francisco Bay System pursuant to Resolution No. 67-30,

To protect shellfishing areas which the Board designates pursuant to Resolution No. 803,

To protect the beneficial water uses, and to achieve other objectives adopted in the resolutions cited above.

5. This Board will review these requirements periodically, as required by law, and will notify the responsible persons before doing so. (Reference: Section 13263(e), California Water Code.)
6. The water quality parameters used in this resolution are as defined in the latest edition of "Standard Methods for the Examination of Water and Wastewater" by the American Public Health Association.
7. The discharger is advised that this Board will use the general concepts of Phase I of the plan recommended by the Final San Francisco Bay-Delta Program Report as guidelines in reviewing any application for construction grants for sewerage facilities proposed to comply with these requirements, and if the discharger intends to make such application he must demonstrate the compatibility of the proposed facilities with the general concepts of the Bay-Delta Program.